CLAIMS

A stent delivery system comprising:

catheter;

balloon operably attached to the catheter; and

stent disposed on the balloon;

coating disposed on the stent, the coating applied to a preliminary stent comprising a permanent portion and a detachable portion while retaining the preliminary stent by the detachable portion, the stent formed from the permanent portion by removing the detachable portion.

- 2. The stent delivery system of claim 1 wherein the coating includes a therapeutic agent.
- 3. The stent delivery system of claim 1 wherein the coating is a polymer.
 - A coated stent comprising: stent;

a coating disposed on the stent, the coating applied to a preliminary stent comprising a permanent portion and a detachable portion while retaining the preliminary stent by the detachable portion, the stent formed from the permanent portion by removing the detachable portion.

- 5. The coated stent of claim 4 wherein the coating includes a therapeutic agent.
 - 6. The coated stent of claim 4 wherein the coating is a polymer
- A method for producing a stent comprising:
 providing a preliminary stent comprising a permanent portion and a
 detachable portion;

retaining the preliminary stent by the detachable portion; applying a coating to the preliminary stent; and detaching the detachable portion from the permanent portion.

- 8. The method of claim 7 further comprising finishing the end of the permanent portion which was detached from the permanent portion.
 - 9. The method of claim 7 further comprising drying the coating.
- 10. The method of claim 7 wherein detaching the detachable portion from the permanent portion further comprises detaching the detachable portion from the permanent portion by laser cutting.
- 11. The method of claim 7 wherein detaching the detachable portion from the permanent portion further comprises detaching the detachable portion from the permanent portion by mechanical cutting.

- 12. The method of claim 7 wherein applying a coating to the preliminary stent further comprises spraying a coating on the preliminary stent.
- 13. The method of claim 7 wherein applying a coating to the preliminary stent further comprises dipping the preliminary stent to form a coating.
- 14. The method of claim 7 wherein the detachable portion further comprises a first detachable portion and a second detachable portion; and retaining the preliminary stent by the detachable portion further comprises retaining the preliminary stent by the first detachable portion and the second detachable portion.
- 15. The method of claim 7 wherein the coating includes a therapeutic agent.
 - 16. The method of claim 7 wherein the coating is a polymer.

portion.

17. A system for producing a stent comprising:

means for providing a preliminary stent comprising a permanent
portion and a detachable portion;

means for retaining the preliminary stent by the detachable portion; means for applying a coating to the preliminary stent; and means for detaching the detachable portion from the permanent

- 18. The system of claim 17 further comprising means for finishing the end of the permanent portion which was detached from the permanent portion.
- 19. The system of claim 17 further comprising means for drying the coating.
- 20. The system of claim 17 wherein the detachable portion further comprises a first detachable portion and a second detachable portion; and means for retaining the preliminary stent by the detachable portion further comprises means for retaining the preliminary stent by the first detachable portion and the second detachable portion.